

## CLAIMS

What is claimed is:

- 1           1.     A wireless transceiver for providing high speed wireless media access,  
2     comprising:  
3           a local transceiver which is capable of transmitting data, via a transmit path while  
4     receiving a feedback signal via a receive path;  
5           a feedback generator connected to said local transceiver for generating and transmitting a  
6     feedback signal in response to said wireless transceiver receiving data; and  
7           a feedback detector connected to said local transceiver for detecting feedback signals.  
8  
9           2.     The wireless transceiver of claim 1, wherein said wireless transceiver ceases  
10    transmission of data upon detection of said feedback signal from a second wireless transceiver.  
11  
12           3.     The wireless transceiver of claim 1, wherein said wireless transceiver is used  
13    within a wireless system.  
14  
15           4.     The wireless transceiver of claim 1, wherein said local transceiver further  
16    comprises a circulator for minimizing attenuation of a received signal, and a radio frequency  
17    echo canceler for minimizing self interference, wherein said local transceiver achieves isolation  
18    between transmit and receive paths of said wireless transceiver.

1           5.     The wireless transceiver of claim 1, wherein said data transmission is a wide band  
2 data transmission and said feedback signal is a narrow-band feedback signal.

1           6.     The wireless transceiver of claim 1, wherein said transmitting of said feedback  
2 symbol is performed within a frequency null to provide isolation between said transmit path and  
3 said receive path.

1           7.     The wireless transceiver of claim 1, wherein said local transceiver performs  
2 isolation between said transmit path and said receive path through use of a radio frequency echo  
3 canceler located within said local transceiver.

1           8.     The wireless transceiver of claim 1, wherein said feedback detector further  
2 comprises an energy detector which is capable of detecting a specific amount of energy within a  
3 feedback channel, that is representative of a feedback signal.

1           9.     The wireless transceiver of claim 8, wherein detection of said specific amount of  
2 energy results in said wireless transceiver ceasing transmission of data until said feedback signal  
3 is de-asserted.

1           10.    The wireless transceiver of claim 8, wherein said specific amount of energy is  
2 derived from said feedback generator which is capable of injecting energy within a particular  
3 frequency.

1           11.     A wireless transceiver for providing high speed wireless media access,  
2 comprising:  
3           a means for transmitting data via a transmit path, while receiving a feedback signal via a  
4 receive path;  
5           a means for generating and transmitting a feedback signal in response to receiving data,  
6 connected to said means for transmitting data; and  
7           a means for detecting feedback signals, connected to said means for transmitting data.

1           12.     The wireless transceiver of claim 11, wherein said wireless transceiver ceases  
2 transmission of data upon detection of said feedback signal from a second means for transmitting  
3 data.

1           13.     The wireless transceiver of claim 11, wherein said wireless transceiver is used  
2 within a wireless system.

1           14.     The wireless transceiver of claim 11, wherein said means for transmitting data  
2 further comprises a means for minimizing attenuation of a received signal, and a means for  
3 minimizing self interference, wherein said means for transmitting data achieves isolation  
4 between transmit and receive paths of said wireless transceiver.

1           15.     The wireless transceiver of claim 11, wherein said data transmission is a wide  
2 band data transmission and said feedback signal is a narrow-band feedback signal.

1           16.     The wireless transceiver of claim 11, wherein said transmission of said feedback  
2     symbol is performed within a frequency null to provide isolation between said transmit path and  
3     said receive path.

1           17.     The wireless transceiver of claim 11, wherein said means for transmitting data  
2     performs isolation between said transmit path and said receive path through use of an isolation  
3     means located within said means for transmitting data.

1           18.     The wireless transceiver of claim 11, wherein said means for detecting feedback  
2     signals further comprises a means of detecting a specific amount of energy within a feedback  
3     channel, that is representative of a feedback signal.

1           19.     The wireless transceiver of claim 18, wherein detection of said specific amount of  
2     energy results in said wireless transceiver ceasing transmission of data until said feedback signal  
3     is de-asserted.

1           20.     The wireless transceiver of claim 18, wherein said specific amount of energy is  
2     derived from said means for generating and transmitting a feedback signal, which is capable of  
3     injecting energy within a particular frequency.

1           21.     A method of providing high speed wireless media access between a series of  
2 wireless transceivers, comprising the steps of:

3           testing for a specified amount of energy within a data channel of a first wireless  
4 transceiver;

5           decoding data associated with said specified amount of energy in response to detecting  
6 said specified amount of energy;

7           said series of wireless transceivers transmitting a feedback signal within said series of  
8 wireless transceivers in order to stop the transmission of data within said series of wireless  
9 transceivers until a destination of said data is determined;

10          identifying a destination address, associated with a destination wireless transceiver, for  
11 said data from said decoded data; and

12          ceasing the transmission of said feedback signal by all wireless transceivers within said  
13 series of wireless transceivers, except by said destination wireless transceiver.

1           22.     The method of claim 21, wherein said steps of testing for said specified amount of  
2 energy and identifying said destination address, are performed simultaneously.

1           23.     The method of claim 21, wherein said method is provided within a wireless  
2 communication system.